

**REMARKS-General**

1. The newly drafted independent claim 16 incorporates all structural limitations of the original claim 1 and includes further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 16-32 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

**Regarding to Rejection of Claims 3-15 under 35USC102**

2. The Examiner rejected claims 3-15 as being anticipated by Begemann (US 6,220,722). Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(b) the *invention* was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

3. In view of 35 U.S.C. 102(b), it is apparent that a person shall **not** be entitled to a patent when his or her *invention was patent* in this country more than one year prior to the date of the application for patent in the United States.

4. However, the Begemann patent and the instant invention are **not the same invention** according to the fact that the independent claim 16 of the instant invention does not read upon the Begemann patent. Apparently, Begemann fails to teach and anticipate the distinctive features of the instant invention as follows:

(a) In claim 16, "**an elongated supporting frame having a first end, an opposed dissipating end and a peripheral surface extended fro the first end to the dissipating end**" is claimed to support the luminary unit on the peripheral surface of the supporting frame, wherein Begemann merely teaches teach the substrate 3 has the shape of pyramid with four flat surfaces while the hollow gear column 1 is connected to the vertex of the pyramid. In other words, Begemann merely teaches the LEDs 4 are mounted at the four flat surfaces of the pyramid without any mention of any elongated

frame having two opposed ends and a peripheral surface extended between the two ends.

(b) In claim 16, “a plurality of luminary elements spacedly mounted on the peripheral surface of the supporting frame” is claimed to electrically connect to the circuit, wherein Begemann merely teaches, as shown in Fig. 1, the LED 4 is mounted on a circuit board while the circuit board is mounted on the flat surface of the pyramid such that Begemann fails to teach and anticipate the direct relationship between the LED and the flat surface of the pyramid. The applicant respectfully submits the luminary element is supported on the peripheral surface of the supporting frame and is electrically connected to the circuit.

(c) In claim 16, “each of the luminary elements emits the light in a radial direction with respect to the supporting frame” is claimed to configure the position of the luminary element, wherein Begemann merely teaches the LEDs 4 are mounted at the four flat surfaces of the pyramid for emitting the light with respect to the flat surface of the pyramid.

(d) In claim 16, “a heat dissipating member mounted at the dissipating end of the supporting frame” is claimed to directly dissipate the heat generated from the luminary unit by means of heat transfer, wherein Begemann merely teaches a fan 9 in the gear column 1 for generating an air flow during operation of the lamp. Accordingly, even though Begemann mentions the outer surface of the gear column 1 is made of metal enabling a good heat conduction from the substrate 3 to the lamp cap 2, the gear column 1 must contain holes 6 for the air flow leaving and re-entering the gear column during the operation of the fan 9. The applicant respectfully submits that since the luminary elements spacedly mounted on the peripheral surface of the supporting frame, the heat generated from the luminary elements directly transfers to the heat dissipating element such that the supporting frame not only supports the luminary unit in position but also forms a passage of thermal energy to transfer the heat from the hot location (at the luminary elements) to the cold location (the heat dissipating element).

(e) Begemann fails to teach and anticipate a transparent light shelter sealed on the peripheral surface of the supporting frame to protect the luminary unit as claimed in claim 17 in addition to what is claimed in claim 16 as a whole. Begemann merely

teaches an envelope 5 which envelops the gear column 1 and the substrate 3 without any mention of any light shelter sealing on the flat surface of the pyramid. Accordingly, the envelope 5 of Begemann is not sealed at the pyramid because the air flow generated by the fan 9 within the envelope 5 is circulated through the holes 6.

(f) Begemann fails to teach and anticipate the light shelter has a **spherical shaped light projecting portion** projected from the peripheral surface of the supporting frame to align with the luminary elements as claimed in claim 18 in addition to what is claimed in claim 16 as a whole. Begemann merely teaches the envelope 5 is big enough to receive the pyramid therein.

(g) Begemann fails to teach and anticipate the circuit having a **through guiding window** and being printed on the peripheral surface of the supporting frame as claimed in claims 19 and 20 in addition to what is claimed in claim 16 as a whole. Begemann merely teaches a secondary optical system 15 is provided above the primary optical system such that a good color blending of green, red and blue light is obtained. Accordingly, the secondary optical system 15 of Begemann is not equivalent to the guiding window of the instant invention. The applicant respectfully submits that the luminary element is mounted at the peripheral surface of the supporting frame within the guiding window to electrically couple with the circuit. The secondary optical system 15 of Begemann fails to teach any relationship between the pyramid and the LED 4 to guide the LED mounted at the pyramid via the secondary optical system 15.

(h) Begemann fails to teach and anticipate the luminary element having two **terminal electrodes** electrically coupling with the peripheral surface of the supporting frame and electrically connecting to the circuit respectively as claimed in claims 21 and 23 in addition to what is claimed in claim 16 as a whole. Begemann merely teaches the LED 4 is provided with two electrical connections 14 wherein via these connections, the LED is soldered onto the substrate 3. It is apparent that Begemann fails to teach and anticipate the same recitation of the luminary element having two terminal electrodes to electrically connect to the supporting frame and the circuit respectively.

(i) Begemann fails to teach and anticipate the supporting frame is an **elongated solid member** as claimed in claims 24 to 26 in addition to what is claimed in

claim 16 as a whole. Begemann does not mention whether the pyramid is a solid member or not.

(j) Begemann fails to teach and anticipate the supporting frame is a hollow member having a **circular cross section** as claimed in claims 27 to 29 in addition to what is claimed in claim 16 as a whole. Begemann merely teaches the gear column 1 is a tubular, hollow member without any mention of any pyramid having a hollow structure with circular cross section.

(k) Begemann fails to teach and anticipate the supporting frame is a hollow member having a **polygonal cross section** as claimed in claims 30 to 32 in addition to what is claimed in claim 16 as a whole. Begemann merely teaches the pyramid has four flat surfaces without any mention of any pyramid having a hollow structure with polygonal cross section.

5. Accordingly, Begemann fails to anticipate the above distinctive features (a) to (k) of the instant invention.

6. Applicant believes that for all of the foregoing reasons, all of the claims are in condition for allowance and such action is respectfully requested.

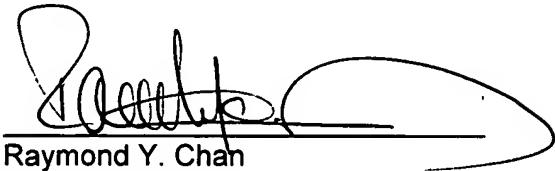
### **The Cited but Non-Applied References**

7. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

8. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection are requested. Allowance of claims 16 to 32 at an early date is solicited.

9. Should the Examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

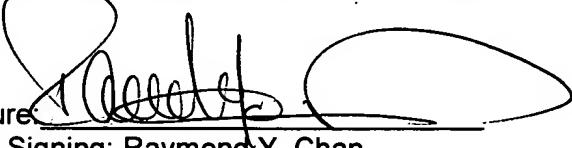


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#### CERTIFICATE OF MAILING

I hereby certify that this corresponding is being deposited with the United States Postal Service by First Class Mail, with sufficient postage, in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on the date below.

Date: 02/07/2007



Signature: Raymond Y. Chan  
Person Signing: Raymond Y. Chan